### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005656 Address: 333 Burma Road **Date Inspected:** 07-Feb-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Shen Fu You **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG Segment** 

## **Summary of Items Observed:**

CALTRANS OSM Quality Assurance (QA) Inspector, Erik Prue was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. QA Inspector and/or found the following:

Outside Bay 13 lift 5AW: QA Inspector randomly observed ZPMC qualified welder ID#047860 tack welding side plate 473 to side plate 513 on segment 027-007. Welder was observed welding in the 1G (flat) position utilizing Shielded Metal Arc Welding (SMAW) process with a 4 mm diameter electrode THJ506Fe-1 (E7018-1). QA Inspector observed the ZPMC QC Wang Jie verifying welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector with QC Inspector observed parameters as follows: preheat temperature to be at 120°C and measured the welding parameters to be 172 amps, 24.1 volts, a travel speed of 130 mm/min. Welding parameters verified by QA Inspector appear to be in general compliance with the approved WPS-B-P-2211-B-U2-FCM.

Bay 13: QA Inspector observed ten (10) ZPMC personell performing fit up of floor beam FB-006 in lift 1BW. ZPMC QC Inspector informed QA Inspector that the floor beam would only be fit up on day shift and that the night shift would be performing tack welding of floor beam.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

# **Summary of Conversations:**

QA Inspector was sent a notification of witness of inspection by ZPMC at 1400 for Ultrasonic Inspection (UT) at 1600 on segment 007 side plate to side plate complete joint penetration (CJP) weld. QA Inspector arrived in bay

# WELDING INSPECTION REPORT

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13 to witness inspection at 1500 and noticed that the inspection was rejected by ZPMC UT inspection personnel. QA Inspector asked ZPMC QC Lai Tao to please inform QA Inspectors of inspections completed earlier than scheduled and whether the inspector was found acceptable or rejectable. ZPMC QC informed QA Inspector that he would try to inform QA of changed notification of inspection schedules.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prue,Erik	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer